CE-ATA Technical Errata

Errata ID	**Protocol 009**
Affected Spec Ver.	**Protocol 1.0**
Corrected Spec Ver.	

Submission info

Name	Company	Date
Amber Huffman	Intel	06/14/2005

Description of the specification technical flaw (add space as needed)

The DD_Cmd61W_ChkCrc state goes back to DD_Idle on a CRC error and ceases transmission for the corresponding RW_MULTIPLE_BLOCK (CMD61) command. It is important that an entire DRQ block be transferred from the host prior to ceasing MMC data line operations or the error cannot be accurately reflected to the host.

This erratum causes the MMC data layer to continue transferring data following a CRC error on a RW_MULTIPLE_BLOCK (CMD61) command. The MMC data layer will end a data transfer early if the device chooses to end the command by issuing the command completion signal.

Description of the correction

The DD_Cmd61W_ChkCrc state in section 2.4.2.2.4 shall be modified as shown:

DD12: DD_Cmd61W_ChkCrc	Transmit positive CRC status of 010b on DAT0 if calculated CRC and received CRC are equal for all data lines, else transmit negative CRC status of 101b on DAT0.		
1. Calculated CRC and received CRC are equal for all data lines		→	DD_Cmd61W_ChkCnt
2. Calculated CRC and received CRC are different for any data line		→	~~DD_Idle~~[1] DD_Cmd61W_Err
~~NOTE:~~ 1. ~~ATA layer is notified that RW_MULTIPLE_BLOCK (CMD61) was not completed successfully.~~			

The DD_Cmd61W_Err state shall be added to section 2.4.2.2.4:

DD13b: DD_Cmd61W_Err	Notify ATA layer that MMC data block reception was not completed successfully.		
1. Data transmission satisfying the Data Unit Count specified in RW_MULTIPLE_BLOCK (CMD61) not finished and ATA layer not ready to receive more data		→	DD_Cmd61W_Bsy
2. Data transmission satisfying the Data Unit Count specified in RW_MULTIPLE_BLOCK (CMD61) not finished and ATA layer is ready to receive data		→	DD_Cmd61W_Entry
3. Data transmission satisfying the Data Unit Count specified in RW_MULTIPLE_BLOCK (CMD61) finished		→	DD_Idle

The DC_Interrupt state in section 2.4.2.1 shall be modified as shown:

DC8: DC_Interrupt	Transmit a single '0' on the CMD line (the command completion signal). Notify MMC Data layer to stop any data transmission.		
1. Unconditional		→	DC_Idle

Disposition log

06/14/2005	Erratum captured
08/31/2005	Erratum ratified